



Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.

RE: 1224-003 -

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: MALLARD CONSTR. Project Name: PARNELL Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: ALACHUA CO. State: FL.

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2023/TPI2014

Wind Code: ASCE 7-22

Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.7

Wind Speed: 130 mph

Floor Load: N/A psf

This package includes 13 individual, Truss Design Drawings and 0 Additional Drawings.

With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T36071369	A01	1/16/25
2	T36071370	A02	1/16/25
3	T36071371	A03	1/16/25
4	T36071372	A04	1/16/25
5	T36071373	A05	1/16/25
6	T36071374	A06	1/16/25
7	T36071375	A07	1/16/25
8	T36071376	A08	1/16/25
9	T36071377	B01	1/16/25
10	T36071378	B02	1/16/25
11	T36071379	B03	1/16/25
12	T36071380	C01	1/16/25
13	T36071381	C02	1/16/25

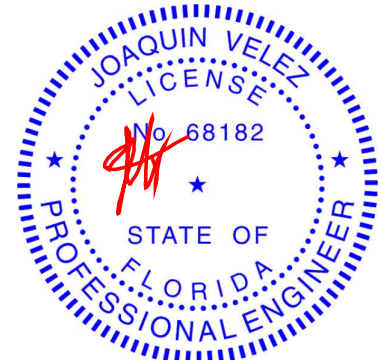


The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2025.

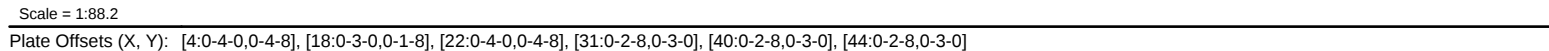
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:44 Page: 1
ID:e99vT0oPotRvd?yqo0GR?gyCf94-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC?i



January 16, 2025



January 16, 2025

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcscomponents.com)

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1224-003	A01	Roof Special Supported Gable	1	1	T36071369
Job Reference (optional)					

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1, 11 lb uplift at joint 44, 18 lb uplift at joint 41, 12 lb uplift at joint 42, 12 lb uplift at joint 43, 13 lb uplift at joint 45, 46 lb uplift at joint 46, 18 lb uplift at joint 48, 19 lb uplift at joint 37, 12 lb uplift at joint 36, 12 lb uplift at joint 35, 12 lb uplift at joint 34, 8 lb uplift at joint 33, 5 lb uplift at joint 30, 3 lb uplift at joint 29, 5 lb uplift at joint 28, 33 lb uplift at joint 27, 3 lb uplift at joint 26, 19 lb uplift at joint 32 and 1 lb uplift at joint 1.
- 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.
- 13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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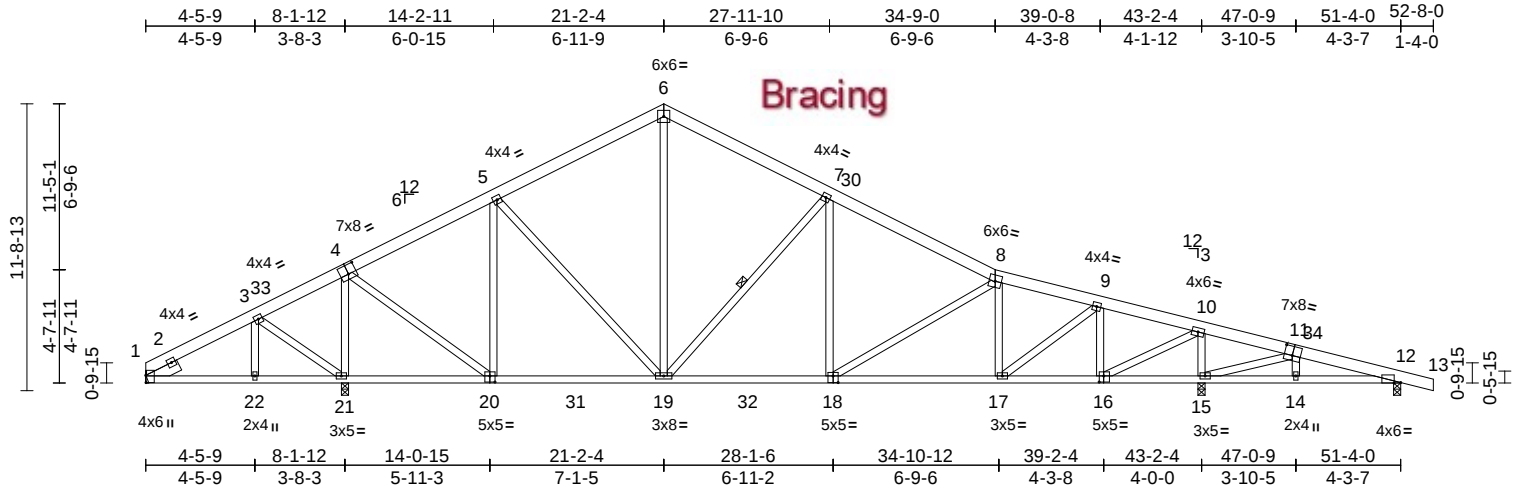
Job	Truss	Truss Type	Qty	Ply	
1224-003	A02	Roof Special	5	1	T36071370
Job Reference (optional)					

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:45

Page: 1

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Plate Offsets (X, Y): [1:0-3-8,0-0-2], [4:0-4-0,0-4-8], [11:0-4-0,0-4-8], [12:0-3-4,Edge], [16:0-2-4,0-3-0], [18:0-2-8,0-3-4], [20:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	-0.12	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.21	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.04	15	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 352 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-5-0

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-19

REACTIONS (size) 1= Mechanical, 12=0-3-8, 15=0-3-8, 21=0-3-8
Max Horiz 1=-195 (LC 10)
Max Uplift 1=-48 (LC 24), 12=-40 (LC 12)
Max Grav 1=168 (LC 23), 12=155 (LC 24), 15=2253 (LC 18), 21=2279 (LC 17)

FORCES

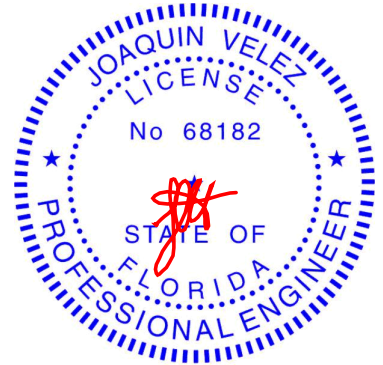
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-1196/213, 7-8=-1796/169, 1-3=-234/272, 3-5=-954/622, 5-6=-1217/219, 8-9=-1905/129, 9-10=-1047/83, 10-12=-24/1138, 12-13=0/19
BOT CHORD 1-22=-231/116, 21-22=-231/78, 19-21=-507/866, 17-19=-20/1838, 15-17=-1081/1021, 14-15=-447/35, 12-14=-437/38
WEBS 8-17=-418/82, 6-19=-43/668, 7-18=0/486, 8-18=-370/49, 7-19=-861/136, 3-22=0/150, 3-21=-452/141, 4-21=-1851/109, 5-19=0/353, 5-20=-691/101, 4-20=-32/1556, 10-15=-1888/101, 10-16=-60/2334, 9-16=-990/72, 9-17=-20/1013, 11-15=-666/94, 11-14=0/150

NOTES

1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 5-1-10, Zone1 5-1-10 to 21-2-4, Zone2 21-2-4 to 28-5-6, Zone1 28-5-6 to 52-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: , Joint 21 SP No.2 , Joint 15 SP No.2 , Joint 12 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 1 and 40 lb uplift at joint 12.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

MiTek®

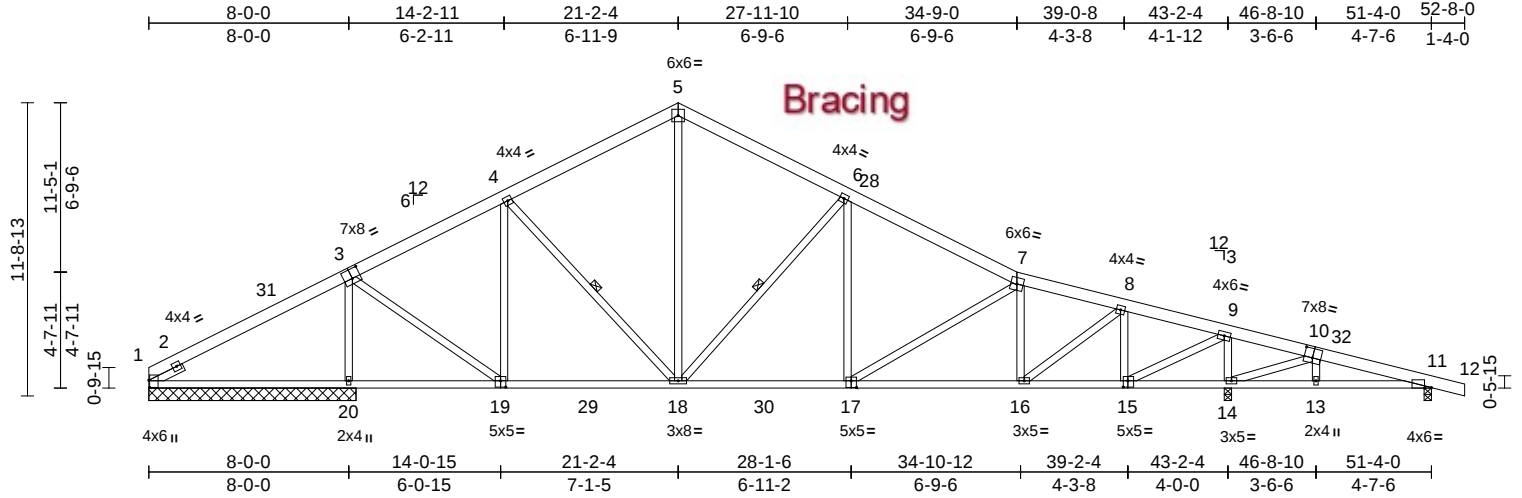
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1224-003	A03	Roof Special	1	1	T36071371
Job Reference (optional)					

Mayo Truss Company, Inc., Mayo, FL - 32066,

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Page: 1



Scale = 1:92.2

Plate Offsets (X, Y): [1:0-3-8,0-0-6], [3:0-4-0,0-4-8], [10:0-4-0,0-4-8], [11:0-3-4,Edge], [15:0-2-4,0-3-0], [17:0-2-8,0-3-4], [19:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.12	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.21	16-17	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 341 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-18, 6-18

REACTIONS (size) 1=8-3-8, 11=0-3-8, 14=0-3-8, 20=8-3-8
Max Horiz 1=-195 (LC 10)
Max Uplift 1=-25 (LC 12), 11=-39 (LC 12)
Max Grav 1=326 (LC 23), 11=155 (LC 24), 14=2302 (LC 18), 20=2017 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

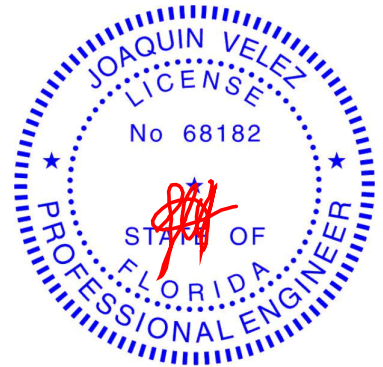
TOP CHORD 5-6=-1298/238, 6-7=-1896/206, 1-4=-1164/234, 4-5=-1316/256, 7-8=-1994/154, 8-9=-1101/95, 9-11=-29/1149, 11-12=0/19
BOT CHORD 1-20=-159/137, 18-20=-152/1068, 16-18=-51/1926, 14-16=-1095/1076, 13-14=-494/45, 11-13=-484/48
WEBS 7-16=-442/91, 4-18=-46/277, 4-19=-512/75, 5-18=-71/748, 6-18=-856/133, 6-17=0/483, 7-17=-368/48, 3-20=-1752/121, 3-19=0/1241, 9-14=-1923/118, 9-15=-89/2410, 8-15=-1025/87, 8-16=-35/1053, 10-13=0/148, 10-14=-642/90

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 5-1-10, Zone1 5-1-10 to 21-2-4, Zone2 21-2-4 to 28-5-6, Zone1 28-5-6 to 52-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SP No.2 .
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 39 lb uplift at joint 11 and 25 lb uplift at joint 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

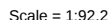
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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MiTek®

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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:46 Page: 1
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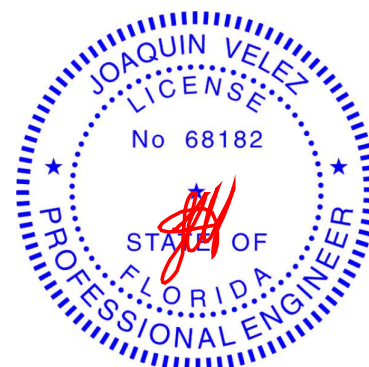


Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.52	Vert(LL)	-0.28	21-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.52	21-22	>988	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.24	15	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 374 lb	FT = 20%

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 5-1-10,
Zone1 5-1-10 to 21-2-4, Zone2 21-2-4 to 28-5-6, Zone1
28-5-6 to 52-8-0 zone; cantilever left and right exposed ;
end vertical left and right exposed; C/C for members and
forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SP No.2 .
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 187 lb uplift at joint
12.
- 8) This truss design requires that a minimum of 7/16"
structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S) Standard

1) Unbalanced roof live loads have been considered for this design.



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Date:

January 16.2025



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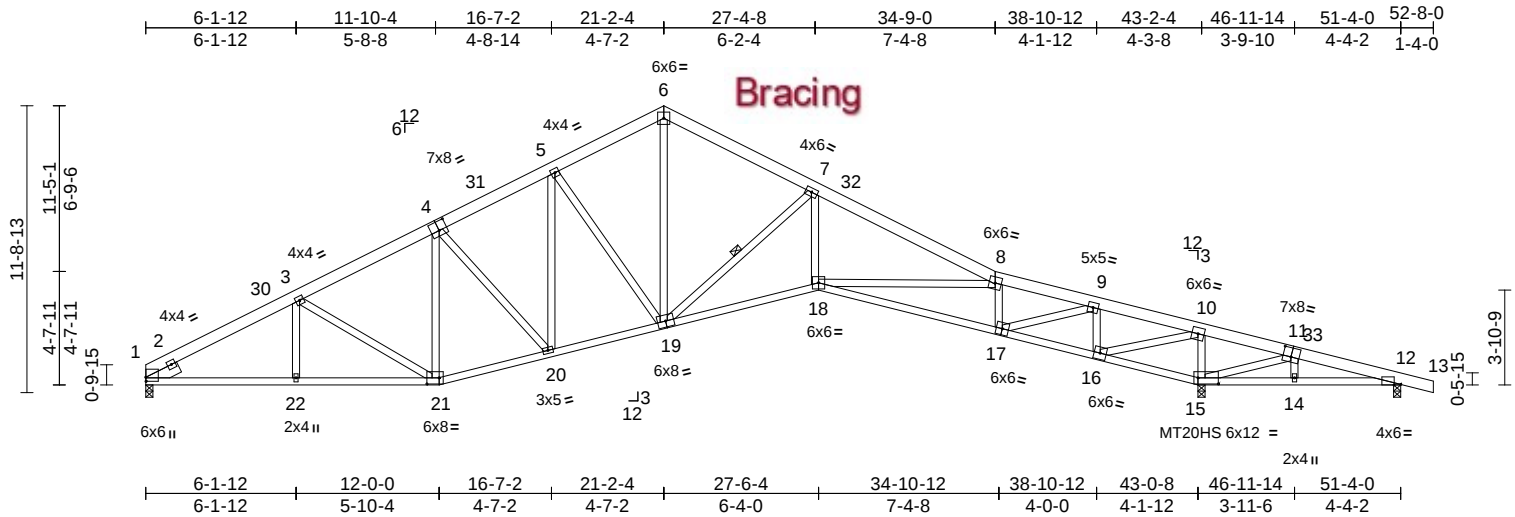
Job	Truss	Truss Type	Qty	Ply	
1224-003	A05	Roof Special	8	1	T36071373
Job Reference (optional)					

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:46

Page: 1

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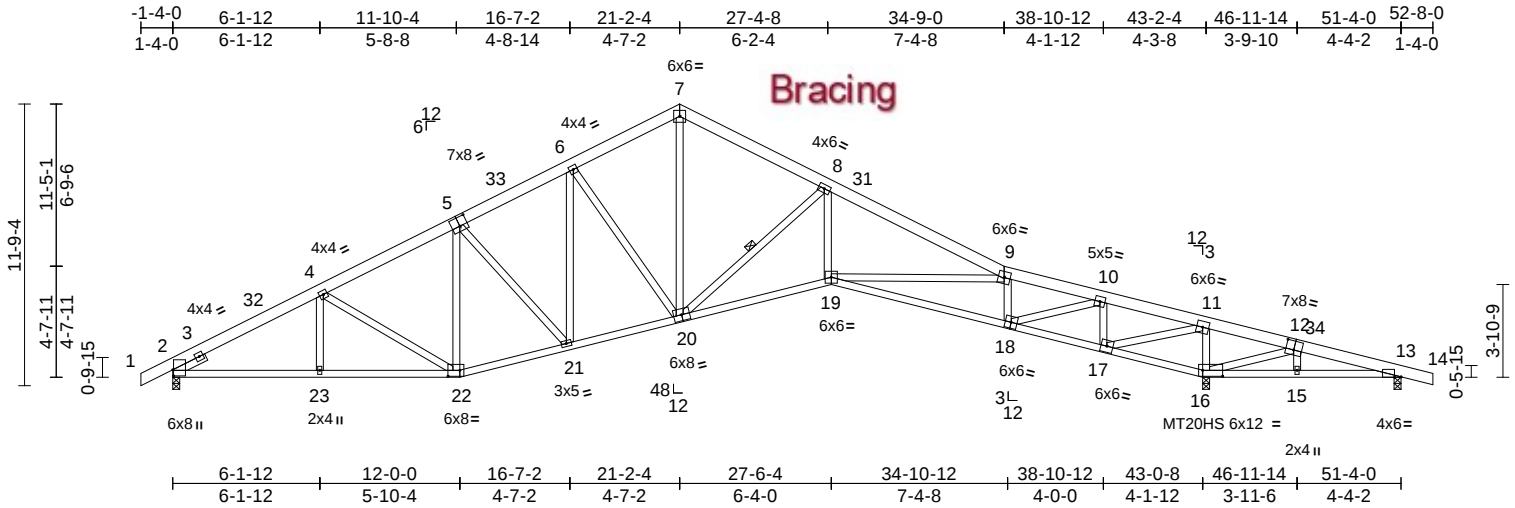
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1224-003	A06	Roof Special	2	1	T36071374
Job Reference (optional)					

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:46

Page: 1

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Scale = 1:96.3

Plate Offsets (X, Y): [2:0-3-0,0-0-6], [5:0-4-0,0-4-8], [12:0-4-0,0-4-8], [13:0-3-4,Edge], [16:0-10-0,0-3-0], [22:0-6-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	-0.27	19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.57	18-19	>902	180	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.29	16	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS								
Weight: 341 lb											FT = 20%	

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 16-13:2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-20

REACTIONS

(size) 2=0-3-8, 13=0-3-8, 16=0-3-8
Max Horiz 2=-199 (LC 10)
Max Uplift 2=-34 (LC 12), 13=-535 (LC 1)
Max Grav 2=1619 (LC 1), 13=-52 (LC 12), 16=3182 (LC 1)

FORCES

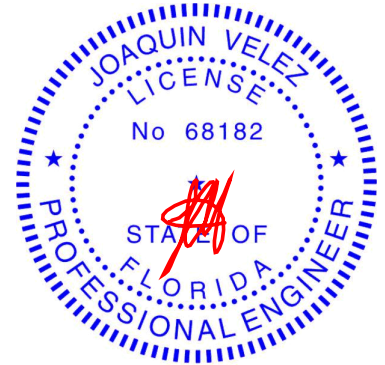
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 7-8=-2000/224, 8-9=-3527/197, 1-2=0/36, 2-4=-2619/196, 4-6=-2290/226, 6-7=-1945/232, 9-10=-2359/130, 10-11=0/330, 11-13=-94/3593, 13-14=0/19
BOT CHORD 2-23=-87/2237, 22-23=-73/2237, 15-16=-2635/106, 13-15=-2625/109, 21-22=-35/2079, 19-21=-19/3130, 17-19=-319/2509, 16-17=-3715/144
WEBS 4-23=0/211, 4-22=-301/85, 5-22=-251/48, 8-19=0/1458, 9-19=0/662, 9-18=-1355/118, 10-18=-64/2687, 11-16=-1940/109, 6-21=-11/265, 5-21=-203/70, 6-20=-459/144, 7-20=-93/1354, 8-20=-1779/141, 10-17=-1620/87, 11-17=-101/3394, 12-15=0/199, 12-16=-864/94

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-4-0 to 3-9-10, Zone1 3-9-10 to 21-2-4, Zone2 21-2-4 to 28-5-6, Zone1 28-5-6 to 52-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Bearings are assumed to be: Joint 2 SP No.2 , Joint 16 SP 2400F 2.0E , Joint 13 SP 2400F 2.0E .
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2 and 535 lb uplift at joint 13.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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MiTek®

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

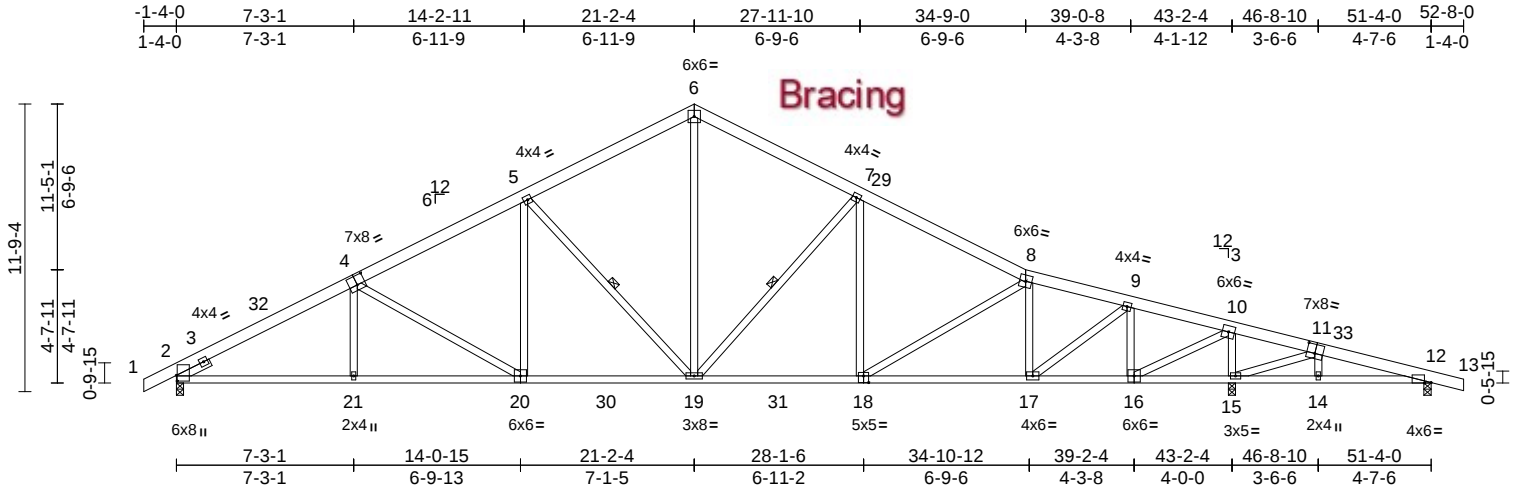
Job	Truss	Truss Type	Qty	Ply	
1224-003	A07	Roof Special	8	1	T36071375
Job Reference (optional)					

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:46

Page: 1

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Scale = 1:94.3

Plate Offsets (X, Y): [2:0-2-12,0-0-6], [4:0-4-0,0-4-8], [11:0-4-0,0-4-8], [12:0-3-4,Edge], [18:0-2-8,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.54	Vert(LL)	-0.22	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.40	19-20	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.13	15	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 345 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 7-19

REACTIONS

(size) 2=0-3-8, 12=0-3-8, 15=0-3-8
Max Horiz 2=-199 (LC 10)
Max Uplift 2=-32 (LC 12), 12=-122 (LC 25)
Max Grav 2=1947 (LC 17), 12=47 (LC 24), 15=2855 (LC 18)

FORCES

(lb) - Maximum Compression/Maximum Tension

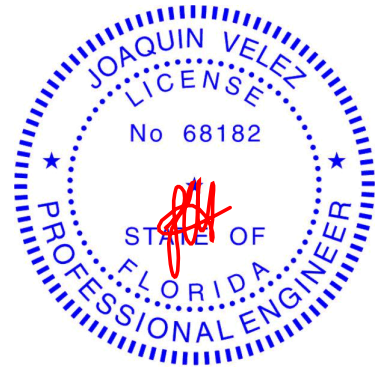
TOP CHORD 6-7=-2047/243, 7-8=-2546/202, 1-2=0/36, 2-5=-3190/222, 5-6=-2039/254, 8-9=-2432/149, 9-10=-1150/90, 10-12=-38/1791, 12-13=0/19
BOT CHORD 2-21=-111/2883, 19-21=-68/2881, 17-19=-46/2360, 15-17=-1719/1137, 14-15=-1080/53, 12-14=-1071/56
WEBS 8-17=-722/92, 4-21=0/245, 5-19=-945/130, 5-20=0/546, 6-19=-74/1414, 7-19=-771/132, 7-18=0/399, 8-18=-237/51, 4-20=-481/96, 10-15=-2454/120, 10-16=-92/3170, 9-16=-1388/88, 9-17=-37/1511, 11-14=0/154, 11-15=-700/91

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-4-0 to 3-9-10, Zone1 3-9-10 to 21-2-4, Zone2 21-2-4 to 28-5-6, Zone1 28-5-6 to 52-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) All bearings are assumed to be SP No.2 .
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 2 and 122 lb uplift at joint 12.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

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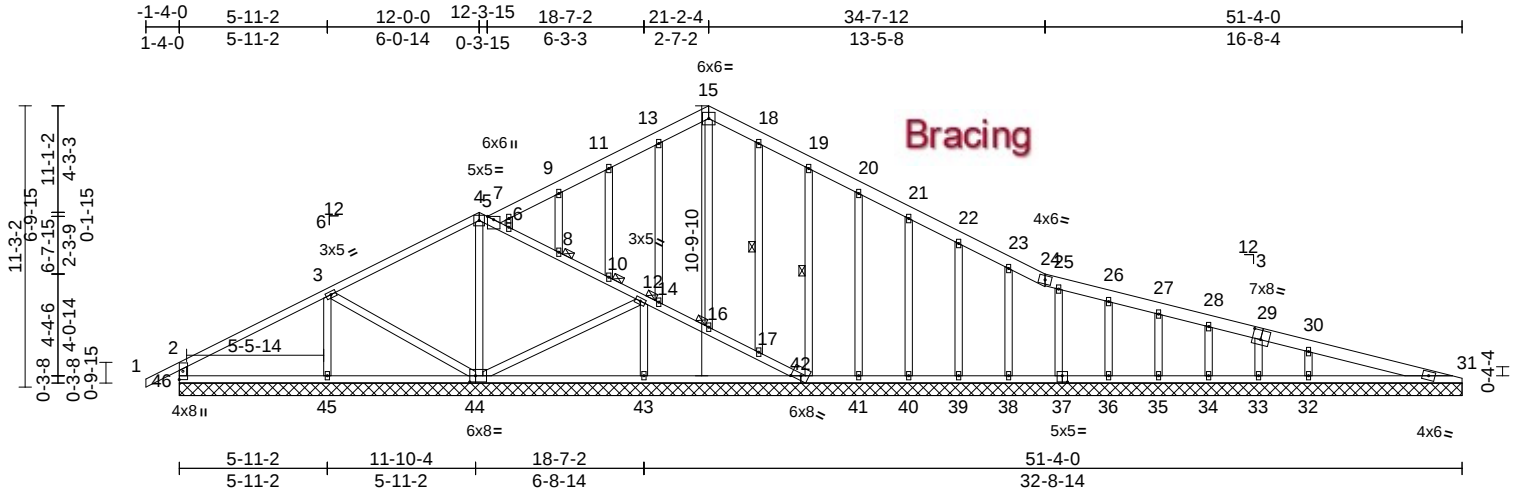
Job	Truss	Truss Type	Qty	Ply	
1224-003	A08	Roof Special Supported Gable	1	1	T36071376
Job Reference (optional)					

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:46

Page: 1

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Scale = 1:92.2

Plate Offsets (X, Y): [29:0-4-0,0-4-8], [37:0-2-8,0-3-0], [42:0-4-7,0-2-2], [44:0-2-12,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.28	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	31	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							
Weight: 371 lb FT = 20%											

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 42-4,1-4:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 42-37,44-42:2x4 SP
2400F 2.0E
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied,
except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 17-18, 19-42
JOINTS 1 Brace at Jt(s): 16,
14, 10, 8

REACTIONS (size)
31=51-4-0, 32=51-4-0, 33=51-4-0,
34=51-4-0, 35=51-4-0, 36=51-4-0,
37=51-4-0, 38=51-4-0, 39=51-4-0,
40=51-4-0, 41=51-4-0, 42=51-4-0,
43=51-4-0, 44=51-4-0, 45=51-4-0,
46=51-4-0
Max Horiz 46=203 (LC 10)
Max Uplift 33=46 (LC 24), 35=3 (LC 12),
36=8 (LC 12), 38=7 (LC 12),
39=13 (LC 12), 40=8 (LC 12),
41=35 (LC 12), 42=7 (LC 12),
44=16 (LC 12), 46=49 (LC 12)
Max Grav 31=211 (LC 9), 34=209 (LC 24),
33=12 (LC 9), 32=541 (LC 24),
35=151 (LC 1), 36=155 (LC 1),
37=179 (LC 24), 38=165 (LC 24),
39=158 (LC 18), 40=172 (LC 1),
41=89 (LC 18), 42=397 (LC 1),
43=531 (LC 17), 44=517 (LC 1),
45=415 (LC 1), 46=375 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

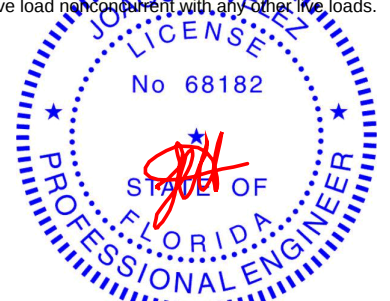
TOP CHORD 2-46=323/231, 5-7=139/35, 7-9=128/60,
9-11=87/72, 11-13=81/120, 13-15=128/203,
15-18=81/179, 18-19=121/151,
19-20=85/100, 20-21=100/41,
21-22=101/4, 22-23=100/16,
23-24=132/29, 24-25=136/23,
25-26=157/37, 26-27=185/46,
27-28=210/54, 28-30=251/66,
30-31=377/100, 4-5=47/106, 5-6=71/164,
6-8=79/177, 8-10=80/180, 10-12=123/216,
12-14=38/147, 14-16=94/219,
16-17=86/200, 17-42=95/217, 1-2=0/40,
2-3=237/164, 3-4=168/107

BOT CHORD 45-46=72/263, 43-45=72/263,
41-43=93/336, 40-41=93/336,
39-40=93/336, 38-39=93/336,
36-38=95/338, 35-36=95/338,
34-35=95/338, 33-34=95/338,
32-33=96/335, 31-32=96/344
15-16=42/18, 13-14=273/161,
10-11=135/82, 8-9=1/6, 6-7=37/31,
17-18=47/36, 19-42=221/99,
20-41=87/109, 21-40=119/102,
22-39=122/101, 23-38=122/95,
25-37=140/55, 26-36=116/89,
27-35=114/81, 28-34=157/88, 29-33=0/65,
30-32=415/177, 4-44=333/152,
3-45=292/111, 3-44=145/243,
12-43=393/194, 12-44=52/36

NOTES

- 1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft;
B=45ft; L=50ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 zone; cantilever
left and right exposed; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2'-0" o.c.
- 9) This truss has been designed for a 10.0 psf bottom
chord live load not concurrent with any other live loads.



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

Continued on page 2

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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Job	Truss	Truss Type	Qty	Ply	
1224-003	A08	Roof Special Supported Gable	1	1	T36071376 Job Reference (optional)

- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) All bearings are assumed to be SP 2400F 2.0E .
- 12) Solid blocking is required on both sides of the truss at joint(s), 42.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 46, 16 lb uplift at joint 44, 7 lb uplift at joint 42, 35 lb uplift at joint 41, 8 lb uplift at joint 40, 13 lb uplift at joint 39, 7 lb uplift at joint 38, 8 lb uplift at joint 36, 3 lb uplift at joint 35 and 46 lb uplift at joint 33.
- 14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

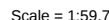
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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:47 Page: 1
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[illegible]

BOT CHORD 2-33=-41/118, 32-33=-41/118, 31-32=-41/118,
30-31=-41/118, 29-30=-41/119,
28-29=-41/119, 25-28=-41/119,
24-25=-41/119, 23-24=-41/119,
22-23=-40/118, 21-22=-40/118,
20-21=-40/118, 18-20=-40/118

WEBS 10-26=-118/25, 9-28=-126/68, 8-29=-123/81,
7-30=-119/75, 6-31=-118/75, 5-32=-115/73,
4-33=-149/95, 11-25=-126/68,
12-24=-123/81, 13-23=-119/75,
14-22=-118/75, 15-21=-115/73,
16-20=-149/95

- 10) All bearings are assumed to be SP 2400F 2.0E .
- 11) Solid blocking is required on both sides of the truss at joint(s), 2.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 2, 7 lb uplift at joint 28, 15 lb uplift at joint 29, 11 lb uplift at joint 30, 11 lb uplift at joint 31, 12 lb uplift at joint 32, 13 lb uplift at joint 33, 7 lb uplift at joint 25, 15 lb uplift at joint 24, 11 lb uplift at joint 23, 11 lb uplift at joint 22, 12 lb uplift at joint 21, 13 lb uplift at joint 20, 13 lb uplift at joint 18, 13 lb uplift at joint 2 and 13 lb uplift at joint 18.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 34.
- 14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=30ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 zone; cantilever
left and right exposed ; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 5) All plates are 1.5x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2'-0" oc.
- 8) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3'-06"00 tall by 2'-00"00 wide will fit between the bottom
chord and any other members.

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/36, 2-4=-97/90, 4-5=-89/70, 5-6=-80/63, 6-8=-72/120, 8-9=-82/167, 9-10=-99/208, 10-11=-99/208, 11-12=-82/167, 12-14=-62/120, 14-15=-51/33, 15-16=-60/34, 16-18=-74/55, 18-19=0/36



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16, 2025



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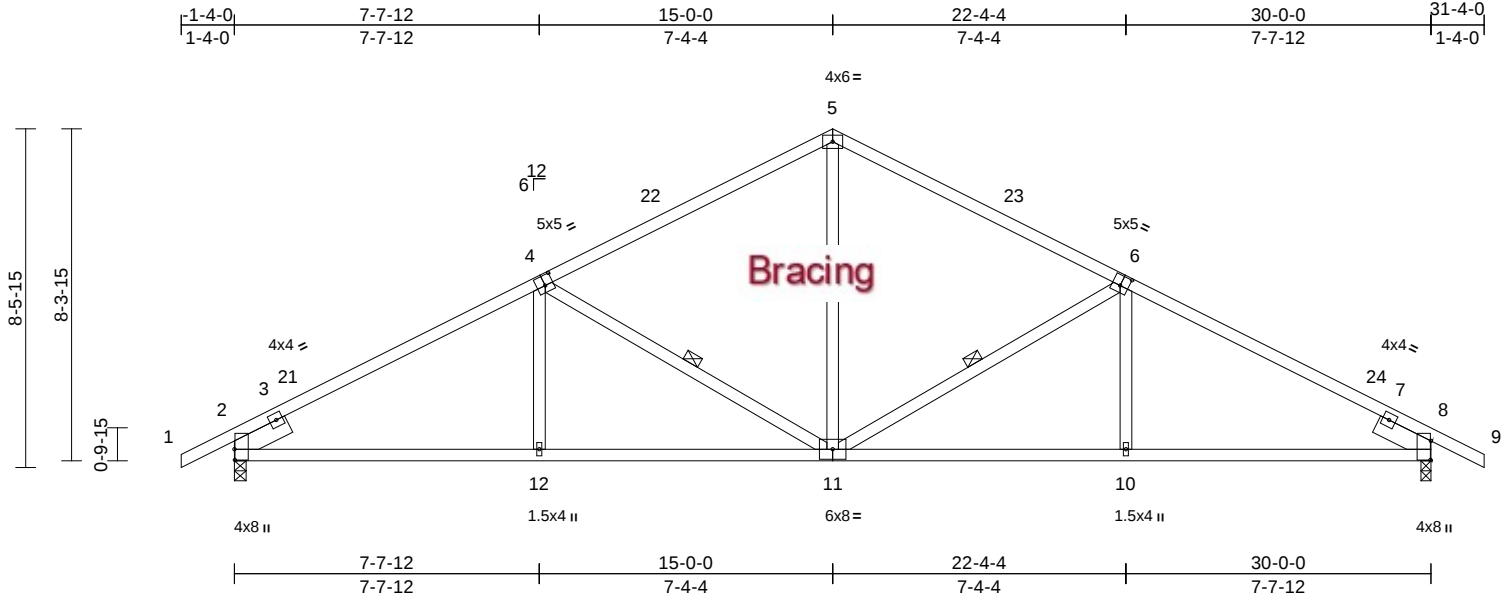
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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1224-003	B02	Common	2	1	T36071378

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:47
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Page: 1



Scale = 1:57.8

Plate Offsets (X, Y): [2:0-3-4,0-0-2], [4:0-2-8,0-3-0], [6:0-2-8,0-3-0], [8:0-5-12,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	-0.11	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	-0.26	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 154 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-11, 4-11

REACTIONS	(size) 2=0-3-8, 8=0-3-0
	Max Horiz 2=-140 (LC 10)
	Max Uplift 2=-31 (LC 12), 8=-31 (LC 12)
	Max Grav 2=1280 (LC 1), 8=1280 (LC 1)

FORCES

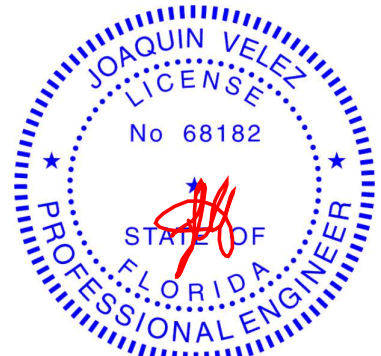
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/36, 2-5=-1898/144, 5-8=-1898/144, 8-9=0/36
BOT CHORD	2-12=-59/1609, 10-12=-9/1607, 8-10=-66/1609
WEBS	4-12=0/260, 5-11=0/716, 6-10=0/260, 6-11=-570/87, 4-11=-570/87

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 31-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2 and 31 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 16,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

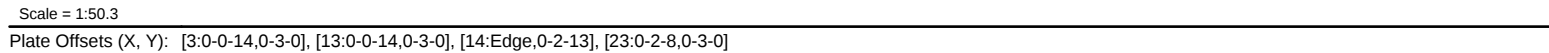
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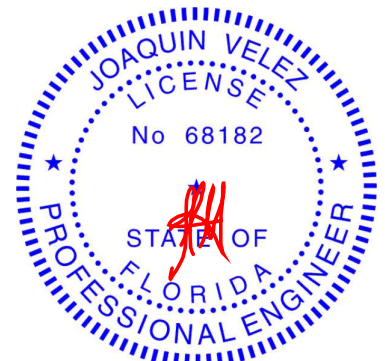
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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:47 Page: 1
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LUMBER		WEBS	8-21=-114/8, 7-22=-127/71, 6-23=-119/78,	12) Provide mechanical connection (by others) of truss to
TOP CHORD	2x4 SP No.2		5-24=-120/76, 4-25=-122/73, 3-26=-114/76,	bearing plate capable of withstanding 20 lb uplift at joint
BOT CHORD	2x4 SP 2400F 2.0E *Except* 23-14:2x4 SP		9-20=-127/71, 10-19=-119/78, 11-18=-120/76,	2, 20 lb uplift at joint 14, 9 lb uplift at joint 22, 13 lb uplift
	No.2		12-17=-122/74, 13-16=-109/78	at joint 23, 12 lb uplift at joint 24, 10 lb uplift at joint 25,
OTHERS	2x4 SP No.2			10 lb uplift at joint 26, 9 lb uplift at joint 20, 13 lb uplift at

BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
REACTIONS	
(size)	2=24-0-0, 14=24-0-0, 16=24-0-0, 17=24-0-0, 18=24-0-0, 19=24-0-0, 20=24-0-0, 21=24-0-0, 22=24-0-0, 23=24-0-0, 24=24-0-0, 25=24-0-0, 26=24-0-0
Max Horiz	2=-104 (LC 10)
Max Uplift	2=-20 (LC 12), 14=-20 (LC 12), 16=-10 (LC 12), 17=-10 (LC 12), 18=-12 (LC 12), 19=-13 (LC 12), 20=-9 (LC 12), 22=-9 (LC 12), 23=-13 (LC 12), 24=-12 (LC 12), 25=-10 (LC 12), 26=-10 (LC 12)
Max Grav	2=176 (LC 23), 14=175 (LC 24), 16=148 (LC 18), 17=163 (LC 24), 18=159 (LC 24), 19=159 (LC 1), 20=167 (LC 24), 21=154 (LC 1), 22=167 (LC 23), 23=159 (LC 1), 24=159 (LC 23), 25=163 (LC 23), 26=157 (LC 17)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/36, 2-3=-76/73, 3-4=-66/63, 4-5=-61/60, 5-6=-53/83, 6-7=-60/129, 7-8=-78/171, 8-9=-78/171, 9-10=-60/129, 10-11=-42/83, 11-12=-33/38, 12-13=-35/36, 13-14=-53/39, 14-15=0/36
BOT CHORD	2-26=-31/94, 25-26=-31/94, 24-25=-31/94, 22-24=-31/94, 21-22=-31/94, 20-21=-31/94, 19-20=-31/94, 18-19=-31/94, 17-18=-31/94, 16-17=-31/94, 14-16=-31/94
NOTES	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60	
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.	
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.	
5) All plates are 1.5x4 MT20 unless otherwise indicated.	
6) Gable requires continuous bottom chord bearing.	
7) Gable studs spaced at 2-0-0 oc.	
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.	
10) All bearings are assumed to be SP No.2 .	
11) Solid blocking is required on both sides of the truss at joint(s). 2.	
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.	
LOAD CASE(S) Standard	



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

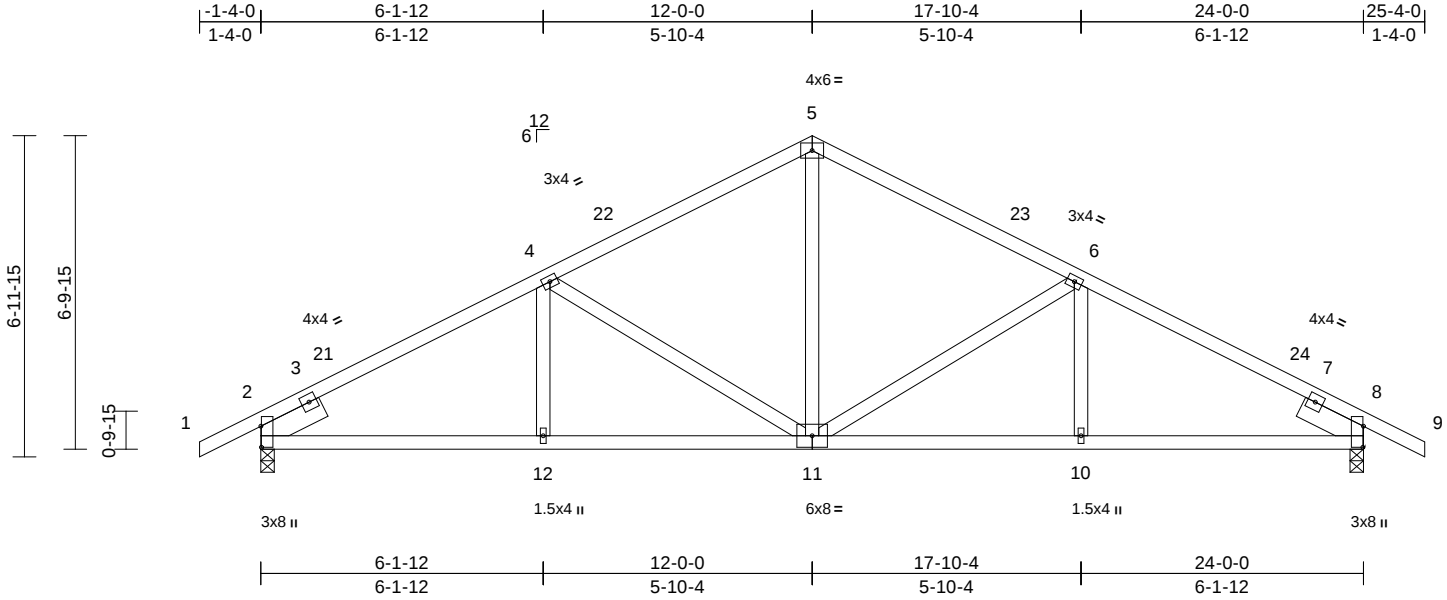
January 16, 2025

Job 1224-003	Truss C02	Truss Type Common	Qty 11	Ply 1	Job Reference (optional) T36071381
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Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Wed Jan 15 13:30:47
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Page: 1



Scale = 1:50.2

Plate Offsets (X, Y): [2:0-5-8,0-0-2], [8:0-5-8,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.07	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	-0.15	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 126 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

(size)	2=0-3-8, 8=0-3-8
Max Horiz	2=-110 (LC 10)
Max Uplift	2=-31 (LC 12), 8=-31 (LC 12)
Max Grav	2=1040 (LC 1), 8=1040 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

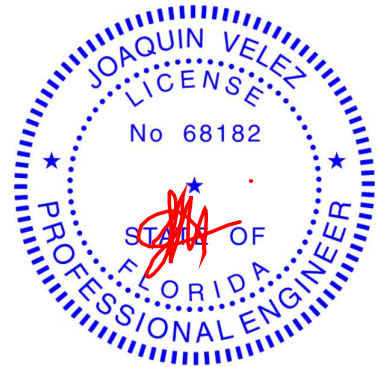
TOP CHORD	1-2=0/36, 2-4=-1459/91, 4-5=-1094/126, 5-6=-1094/126, 6-8=-1459/91, 8-9=0/36
BOT CHORD	2-12=-31/1233, 10-12=-14/1233, 8-10=-40/1233
WEBS	4-12=0/195, 5-11=0/553, 6-10=0/195, 4-11=-419/75, 6-11=-419/75

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 1-4-0 to 1-8-0, Zone1 1-8-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2 and 31 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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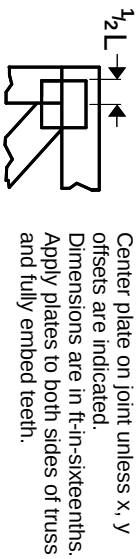
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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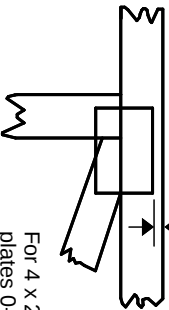
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Symbols

PLATE LOCATION AND ORIENTATION



0- $\frac{1}{16}$ "



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

—
This symbol indicates the required direction of slots in connector plates.

* Plate location details available in Mitek software or upon request.

PLATE SIZE

4 X 4

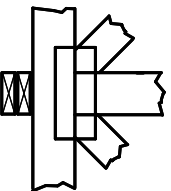
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

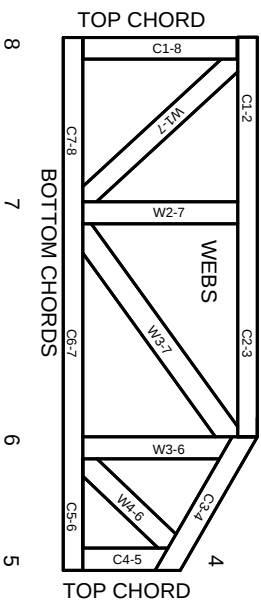
Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)

1 2 3 Joint ID typ.



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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Mitek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.